



**Australian Government**

**Department of Finance and Deregulation**

# **Australian Government ICT expenditure, 2008-09 – 2009-10**

**Version 1.0**

# Contents

---

**Introduction**

**Definitions**

**Aggregate expenditure**

**Aggregate personnel**

**Infrastructure**

# Licensing

The Department of Finance and Deregulation is licensed to use, reproduce, adapt, modify, distribute and communicate the information contained in the Australian Government ICT Expenditure 2008-09 – 2009-10 Report.

With the exception of the Commonwealth Coat of Arms, and subject to any copyright notices contained in individual documents, all material presented in the Australian Government ICT Expenditure 2008-09 – 2009-10 Report is provided under a Creative Commons Australia Licence (Attribution-NonCommercial 3.0 Unported) (<http://creativecommons.org/licenses/by-nc/3.0/>). To the extent that copyright subsists in a third party (such as in the material relating to the definitions of cost elements and service towers at pages 5 to 7), permission will be required from the third party to reuse the material.



The document must be attributed: “Australian Government ICT Expenditure 2008-09 – 2009-10 Report”.

## Use of the Coat of Arms

The terms under which the Coat of Arms can be used are detailed on the following website: <http://www.itsanhonour.gov.au/coat-arms/>.

## Contact us

Inquiries regarding the licence and any use of this data are welcome at:

Investment Management Branch  
Australian Government Information Management Office  
Department of Finance and Deregulation  
John Gorton Building King Edward Terrace Parkes ACT 2600  
Email: [AGIMO.feedback@finance.gov.au](mailto:AGIMO.feedback@finance.gov.au)

# Introduction

This report presents data about Information and Communication Technology (ICT) use and expenditure in 2008-09 and 2009-10 by Australian Government agencies. The data has been sourced from agencies subject to the Financial Management and Accountability Act 1997 through an annual ICT benchmarking data collection exercise conducted by the Department of Finance and Deregulation (Finance).

The objectives of ICT benchmarking are to measure progress in improving the efficiency and effectiveness of ICT services in the delivery of Government programs, and inform other Whole-of-Government ICT policy initiatives. The first round of benchmarking was conducted as part of the ICT Reform Program in 2008-09, following the Review of the Australian Government's use of ICT by Sir Peter Gershon.

The objective of making this data available is to inform the general community and industry about Australian Government ICT use and expenditure.

The report provides aggregate figures on:

- Total ICT expenditure, including a breakdown of expenditure by service tower and cost element;
- ICT personnel, including by service tower, whether internal or external, and by level; and
- ICT infrastructure deployed by agencies, including numbers of servers and desktop devices.

The report shows that:

- The Australian Government is a major consumer and producer of ICT services, with annual expenditure of about \$5 billion per year.
- Total Australian Government ICT expenditure increased by a small margin (about 1% in real terms) between 2008-09 and 2009-10.
- Business-as-usual costs are in line with the government target of 70% of expenditure.
- About one-quarter of expenditure was on internal staff in 2009-10. Three-quarters of expenditure was on hardware, software, outsourced services and external personnel.
- About one-third of expenditure was on applications – systems used to process information and transactions. Other service towers accounted for a much lower proportion of total expenditure individually.

This report is based on data provided by individual agencies. Finance has undertaken limited validation checks on this data only.

# Contents

---

Introduction

**Definitions**

Aggregate expenditure

Aggregate personnel

Infrastructure

# Definitions – Agencies / Cost elements

## Agencies

- Large agency – an agency with total annual ICT expenditure exceeding \$20m.
- Medium agency – an agency with total annual ICT expenditure between \$2m and \$20m.
- Small agency – an agency with total annual ICT expenditure below \$2m.

Annual expenditure is calculated on the basis of operational expenditure plus capital expenditure, and excludes depreciation.

## Cost elements

- Carriage - Carriage refers to the costs of providing digital or analogue electronic impulses (including data, voice or video) over a distance.
- External personnel expenditure - External Full Time Equivalent (FTE) personnel are staff who provide services on a time and materials basis (eg "body shopping"). These staff are generally contractors, but may also be described by agencies as consultants (see note below).
- Hardware expenditure - Expenditure on purchasing, leases, maintenance and repair for all physical ICT equipment, such as servers, PCs, terminals, printers, peripherals, printing equipment, networking and telecommunications equipment, materials/accessories and disaster recovery hardware.
- Internal personnel expenditure - For all internal FTE (eg, Australian Public Service staff) involved in ICT activities, includes all wages and salaries, provisions for staff entitlements and staff on-costs.
- Other expenditure - Expenditure on occupancy, facilities, utilities and other ICT spend not captured in other cost element categories.
- Services outsourced to external provider - Expenditure on services provided under a non-government third-party's responsibility.
- Services outsourced to FMA Act agencies - Expenditure on services provided under the responsibility of Agencies subject to the Financial Management and Accountability Act 1997 (FMA Act).
- Software expenditure - Expenditure on licences, as well as repair and maintenance for external and standard software, systems software, and standard office productivity applications as they apply to each service tower and the total agency level.

# Definitions – Service towers (1)

- Applications - Programs and other Software (including the supporting documentation, media, on-line help facilities and tutorials) that perform user or business related information processing functions.
- End user infrastructure - Services, hardware, software, personnel, functions, activities and responsibilities that are provided directly to end-users in an Agency. Hardware includes desktop and laptop computers, thin clients, PDAs, and support of these activities, software (including SOE and client software), distributed file, email and print servers, and peripherals such as printers and scanners.
- Facilities - Physical facilities, including raised floor space, power supply, air conditioning, and associated utilities, as well as security and facilities monitoring and maintenance services, personnel, activities, hardware and software.
- Gateway - Services, hardware, software, functions, personnel, activities and responsibilities that securely connect and provide an interface between two different data networks (typically internal networks and external networks).
- Helpdesk - Buildings, infrastructure, associated technologies and fully trained staff who respond to Level 1 helpdesk calls from end users, co-ordinate incident management, problem management and request management activities, and act as a single point of contact for agency end-users in regard to all service towers.
- ICT management - Services, equipment, activities, personnel, functions and responsibilities providing cross-service tower governance, controlling, security, architecture, finance and human resources services to the ICT organisation.

## Definitions – Service towers (2)

- LAN and RAS - Local area networks (LANs) comprise all network elements (LAN hardware, software, transport systems, interconnect devices, wiring and cabling) inside buildings and campuses that are used to transmit data within or among LAN segments, as well as services, software, functions, personnel, activities and responsibilities to support operation of these. Remote access services (RAS) comprise all dial-in and VPN infrastructure services, hardware, software, functions, personnel, activities and responsibilities provided to remote users in the business (eg, telecommuters, field staff).
- Mainframe - Services, hardware, software, functions, personnel, activities and responsibilities involved in providing enormous Input/Output processing capacity and running a typical mainframe OS. These are typically housed centrally in data centres.
- Midrange - Services, hardware, software, functions, personnel, activities and responsibilities involved in running server applications with typically high Input/Output processing capacity, which are typically housed centrally in data centres, but not mainframes.
- Storage - Services, hardware, software, functions, personnel, activities and responsibilities involved in providing data storage services to the business.
- Voice services - All carrier and telecommunications services, carriage, hardware, software, activities, personnel, functions and responsibilities involved in providing voice services and non-IP videoconferencing services to the business, including VoIP services.
- WAN - Services, hardware, software, functions, personnel, activities and responsibilities provided to the business to achieve data connectivity across a long-haul, high speed backbone wide area transmission network.

# List of metrics

---

## ICT Expenditure

- Total ICT expenditure
- ICT operating expenditure as proportion of total operating expenditure
- BAU ICT expenditure as proportion of total ICT expenditure
- Total ICT expenditure by service tower
- Total ICT expenditure by cost element

## ICT personnel

- ICT FTE as proportion of total FTE
- Proportion of ICT FTE in each contribution area
- Proportion of internal ICT FTE at each APS pay-grade
- Proportion of ICT FTE in each service tower

## ICT Infrastructure

- Midrange – physical servers– functional breakdown - large agencies
- Midrange – physical servers– Wintel/\*nix breakdown - large and medium agencies (\*nix' are midrange server platforms based on Unix, Linux, Solaris, FreeBSD and related platforms)
- Number of operating system instances per physical server
- End user infrastructure – mix of devices – large and medium agencies
- End user infrastructure – Storage – Large agencies

# Contents

---

Introduction

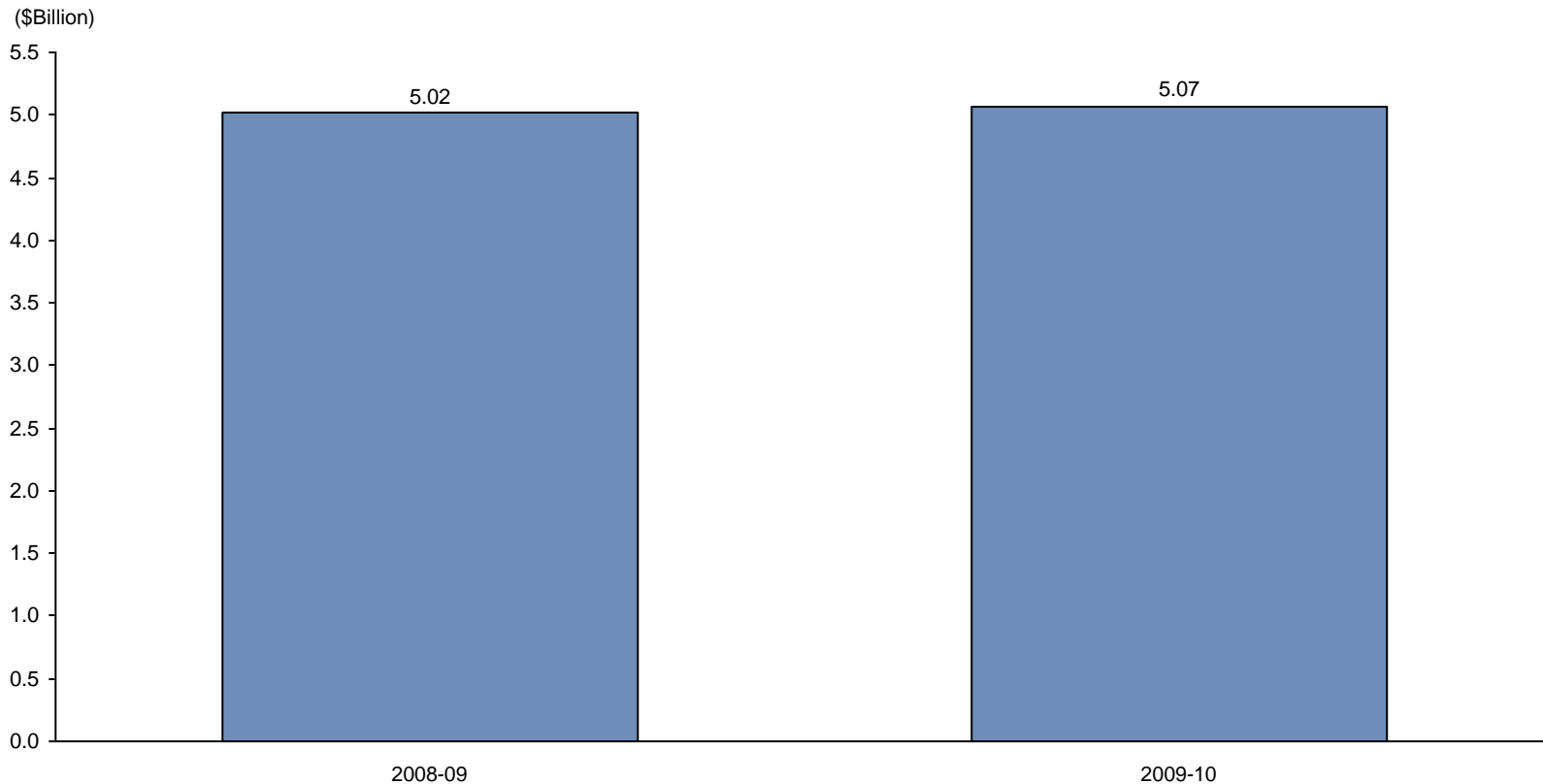
Definitions

**Aggregate expenditure**

Aggregate personnel

Infrastructure

# Total ICT expenditure

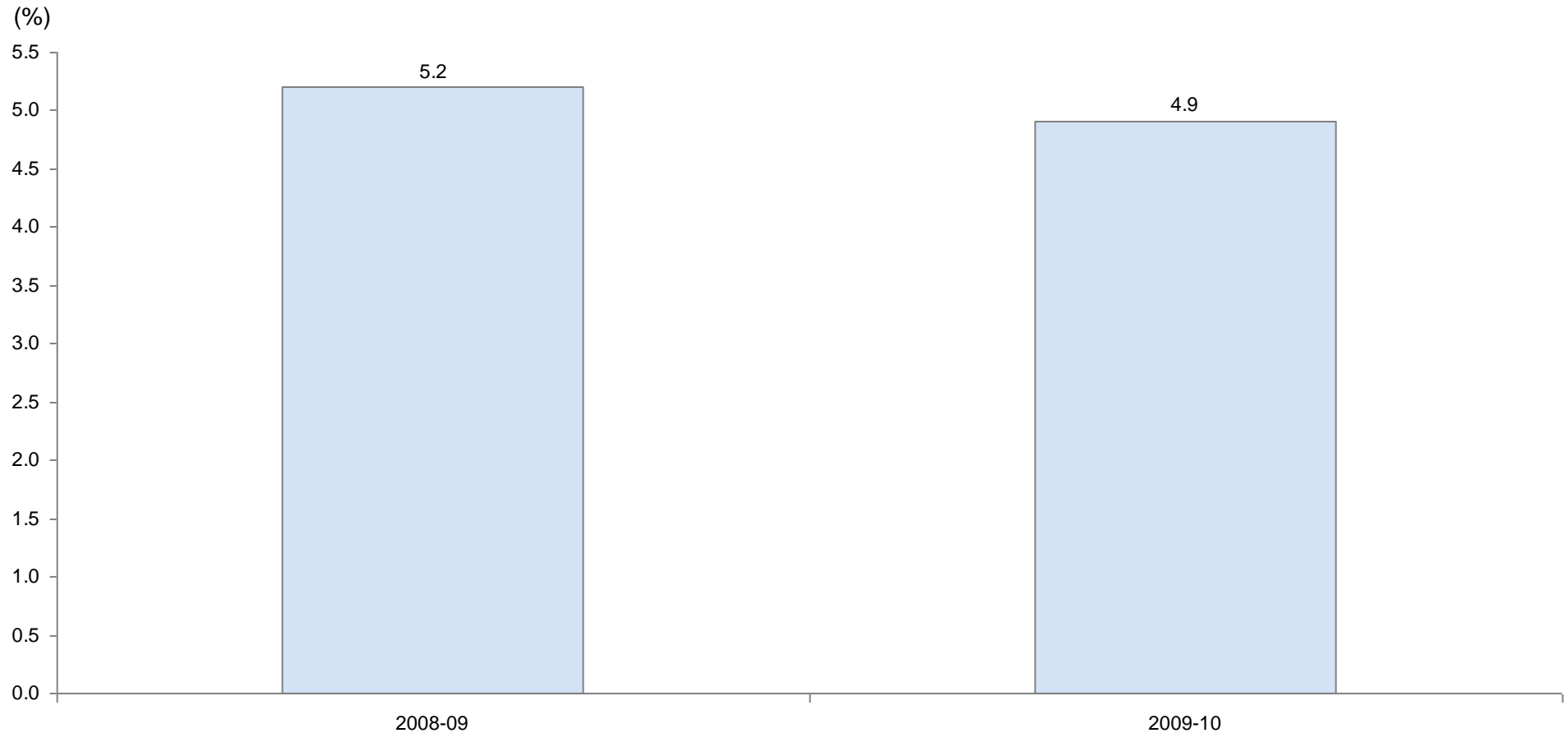


Definition: Total reported ICT expenditure is calculated on the basis of operational expenditure plus capital expenditure (excludes depreciation expenditure). This provides a view of the annual actual expenditure on ICT. The totals are net of the costs of services outsourced to other FMA Act agencies, in order to avoid double-counting.

Note: 2008-09 Data is inclusive of estimated expenditure for identified areas of non-reporting – total estimated component equals \$160 million. 2008-09 figures have been adjusted, using CPI, to a 2009-10 base year. Data used to populate this graph is of two types: (1) ICT benchmarking data – as sourced from the ICT benchmarking program from 2008-09 to 2009-10; and (2) estimated data – areas of known non-reporting that have been estimated and included in the total ICT expenditure where appropriate. Estimation of non-reporting is quantified by applying a CPI indexation of data from following years as reported in the ICT benchmarking survey.

Source: ICT Benchmarking data collection as at 4 March 2011

# ICT operating expenditure as proportion of total operating expenditure



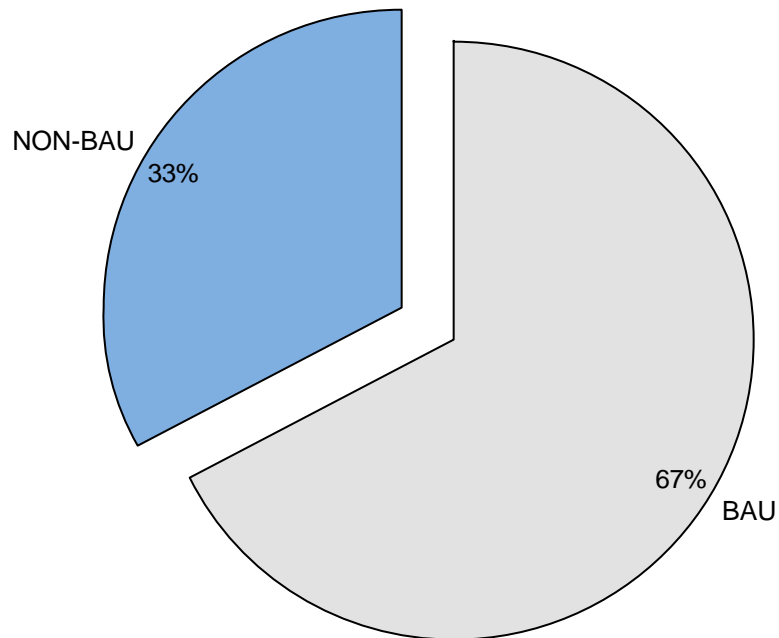
Definition: Total reported ICT operating expenditure divided by total reported operating expenditure . Excludes capital expenditure or depreciation.

Note: Total Operating Expenditure includes Administered and Departmental expenditure on wages and suppliers, but excludes transfer payments and interest payments.

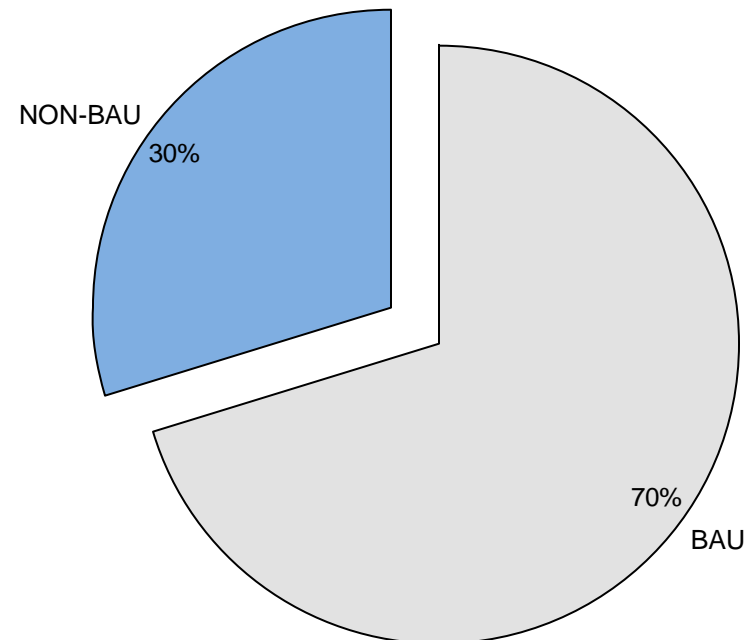
Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Business as usual (BAU) ICT expenditure as proportion of total ICT expenditure

2008-09



2009-10

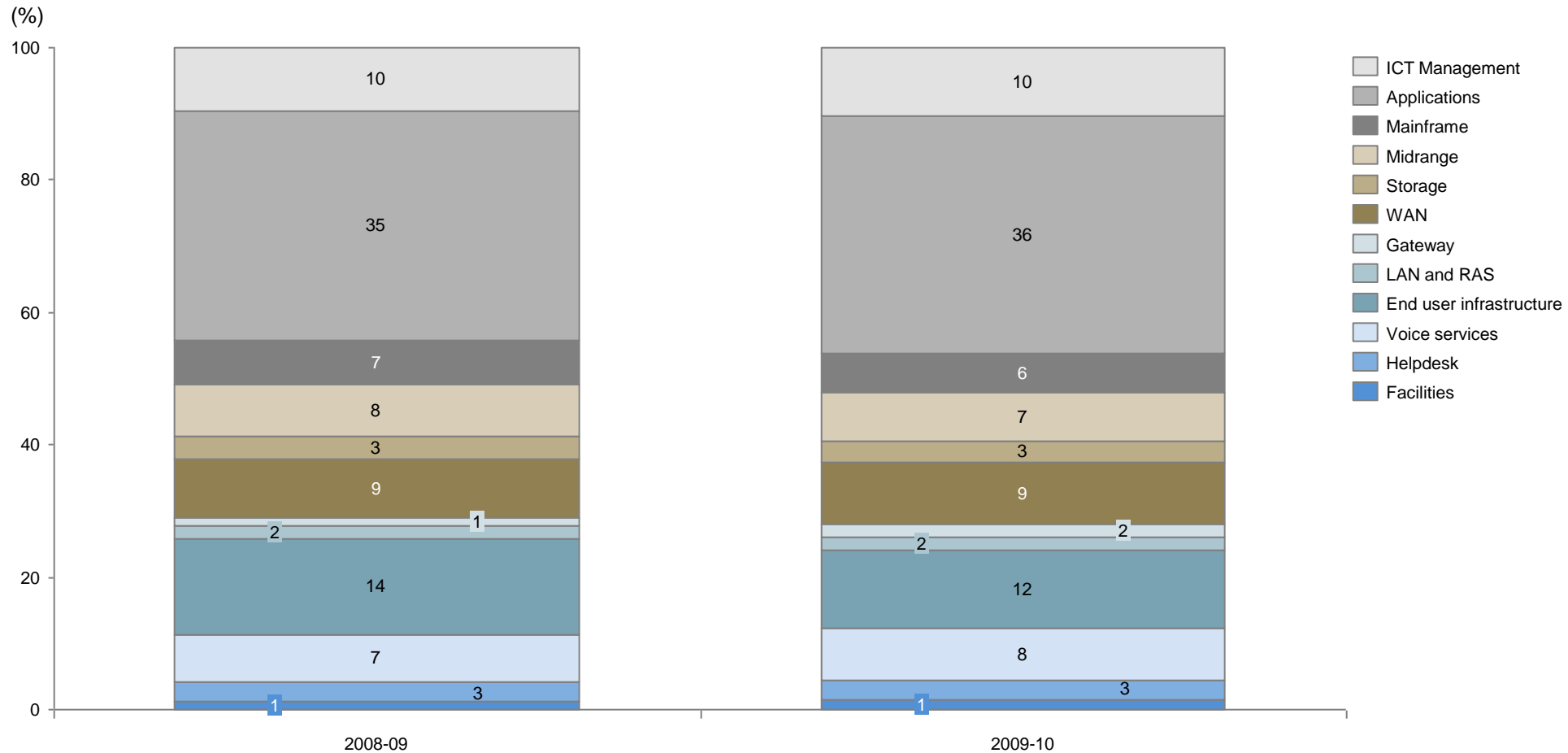


Definition: Total reported ICT Business-as-usual (BAU) expenditure divided by total reported ICT expenditure. Expenditure is calculated on the basis of operational expenditure plus capital expenditure.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Total ICT expenditure (%) by service tower

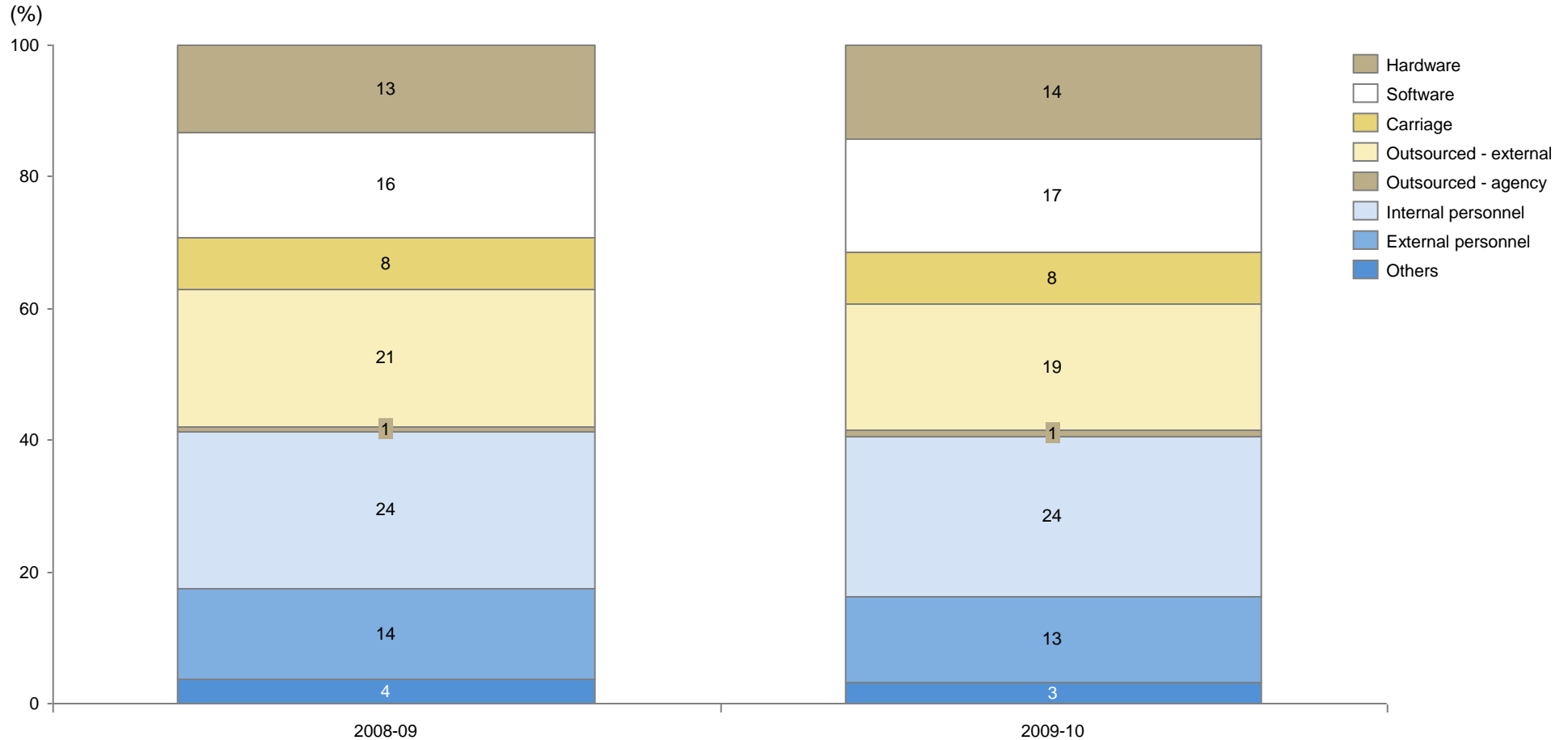


Definition: Total reported ICT expenditure by service tower divided by total reported ICT expenditure. Calculated on the basis of operational expenditure plus capital expenditure. Expressed as a percentage.

Note: Only agencies that provided data for this metric in both years are included in the calculation of the average change. Data is for Large and Medium agencies only. For medium agencies, midrange costs include mainframe costs.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Total ICT expenditure by cost element



Definition: Total reported ICT expenditure by cost element divided by total reported ICT expenditure. Calculated on the basis of operational expenditure plus capital expenditure. Expressed as a percentage.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only.  
 Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Contents

---

Introduction

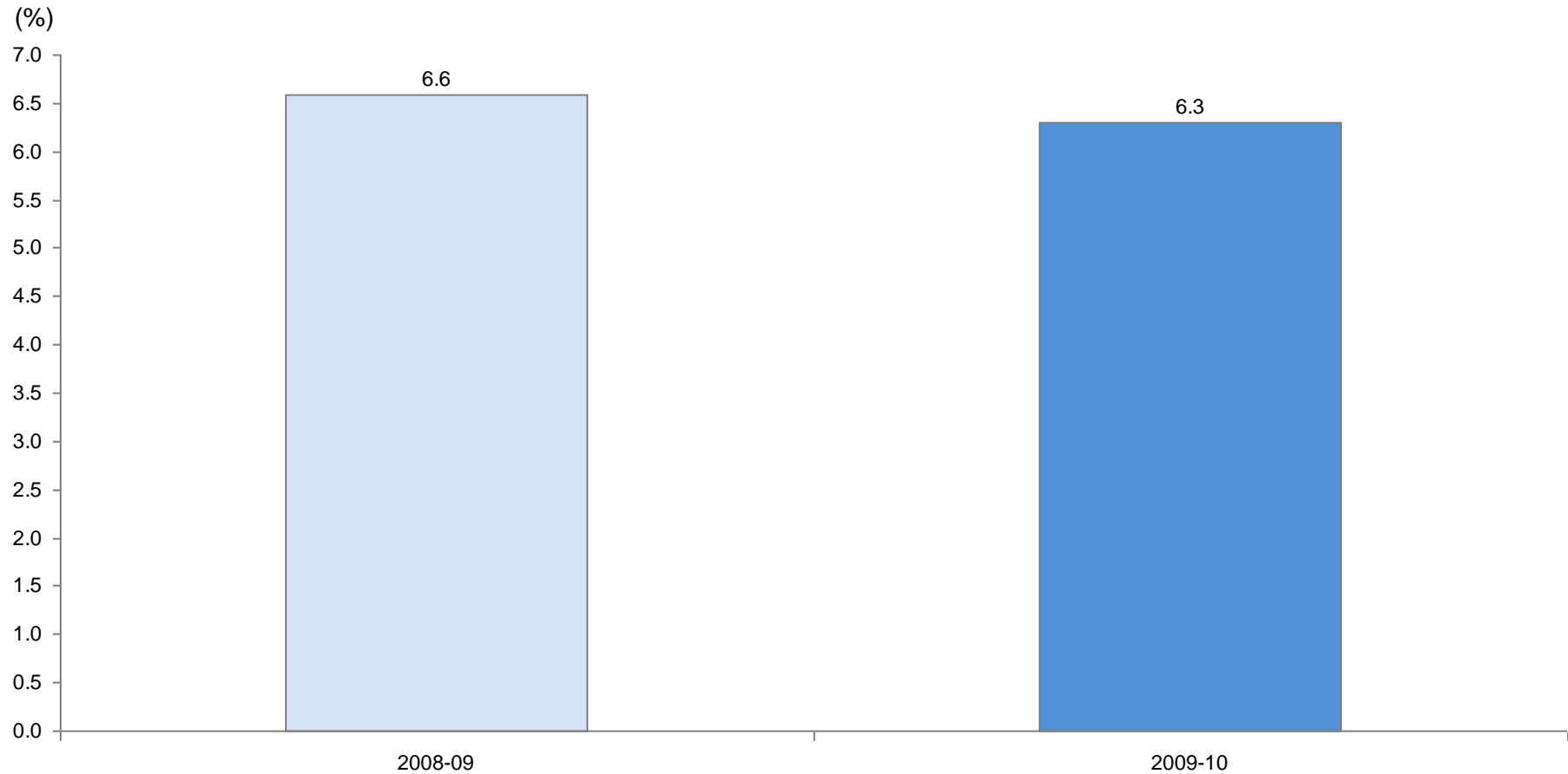
Definitions

Aggregate expenditure

**Aggregate personnel**

Infrastructure

# ICT FTE as proportion of total FTE

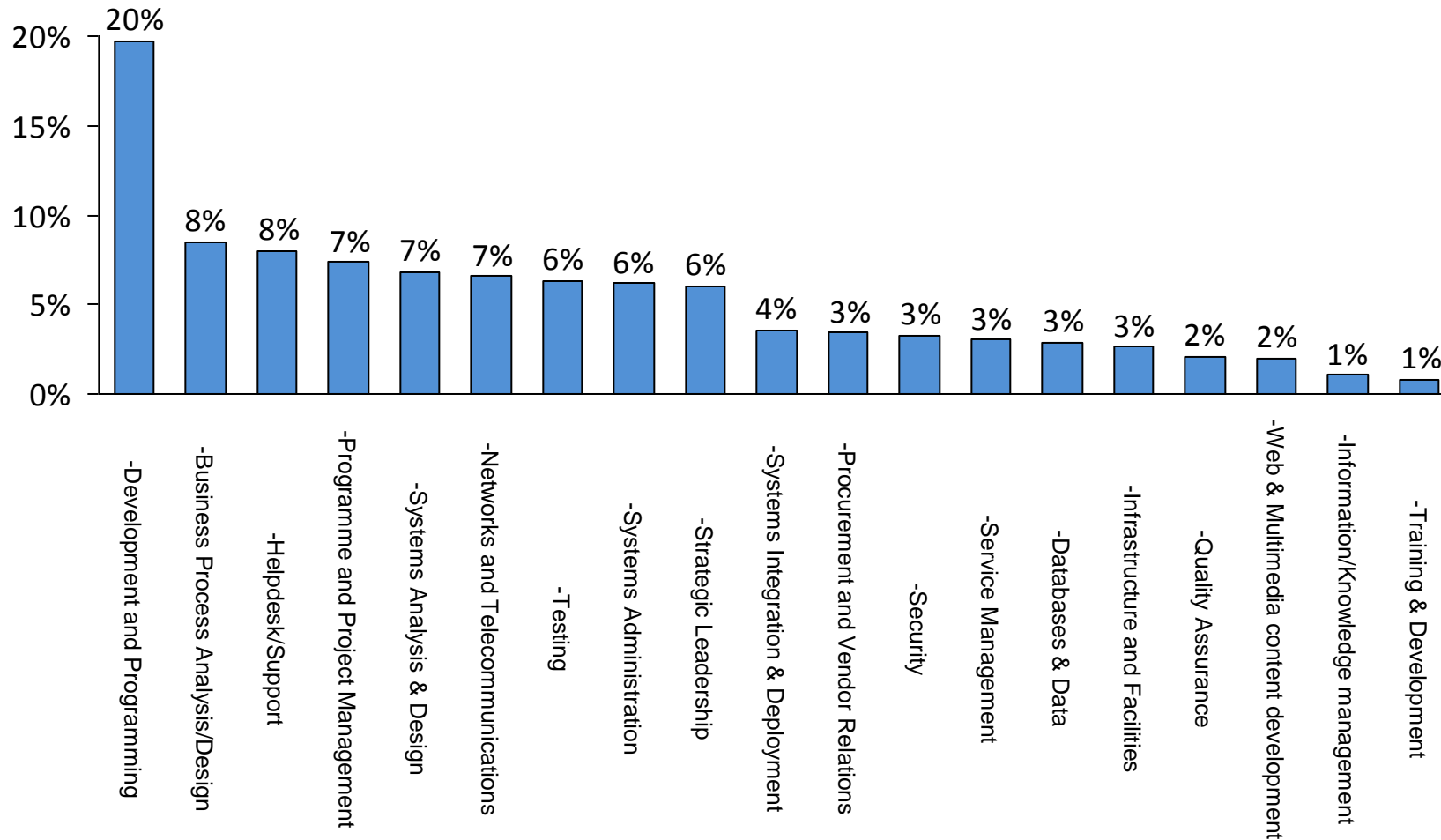


Definition: Total reported ICT personnel (internal and external) divided by the total reported number of FTE.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only. Data excludes some staff not employed under the Public Service Act.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Proportion of ICT FTE in each contribution area – 2009-10

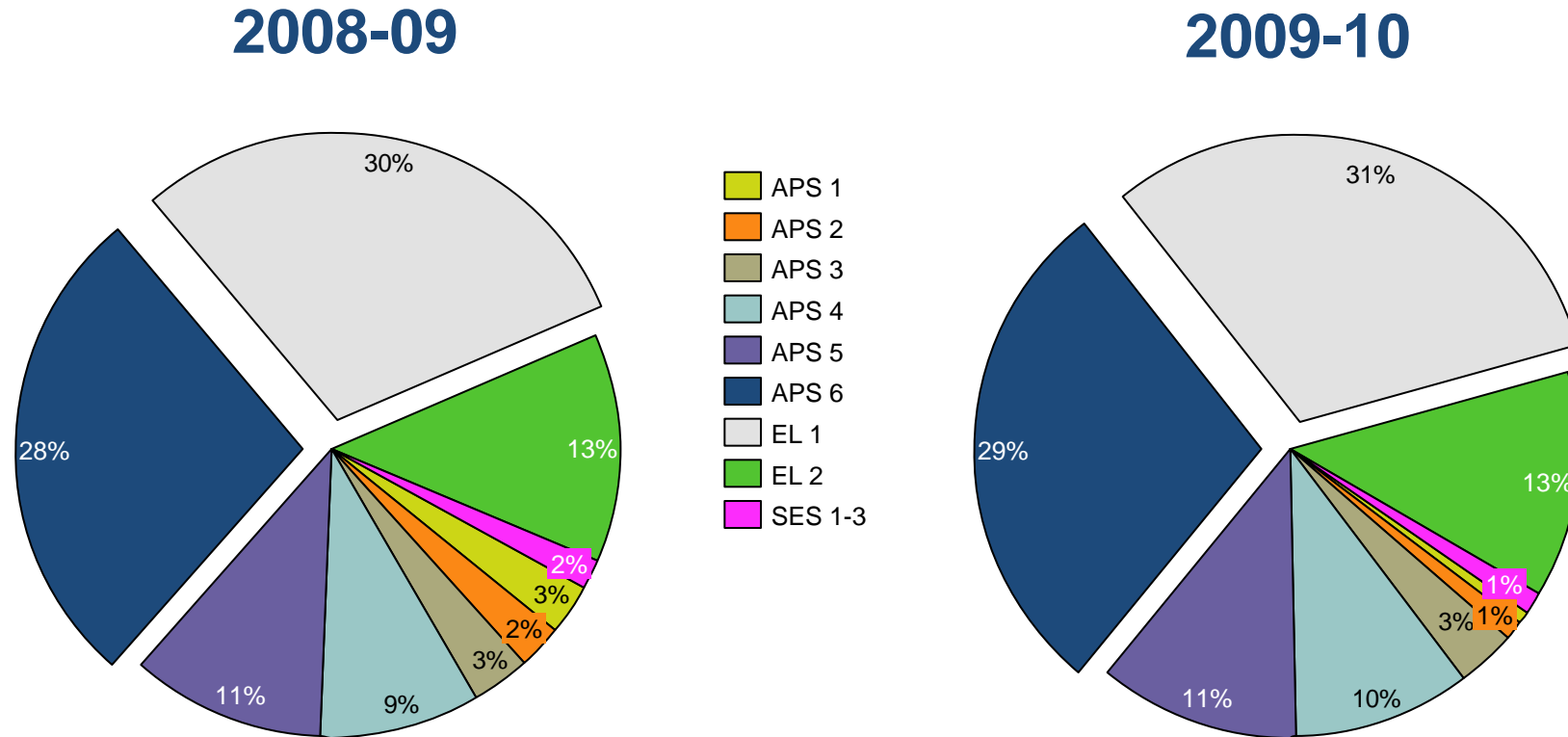


Definition: Total reported ICT FTE within a contribution area divided by the total reported number of ICT FTE. In all contribution areas. (Contribution areas are defined in the APS ICT Career Structure, which is built upon the Skills Framework for the Information Age (SFIA), an internationally recognised ICT capability model).

Note: Data is available for 2009-10 only. Data excludes some staff not employed under the Public Service Act.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Proportion of internal ICT FTE at each APS pay-grade

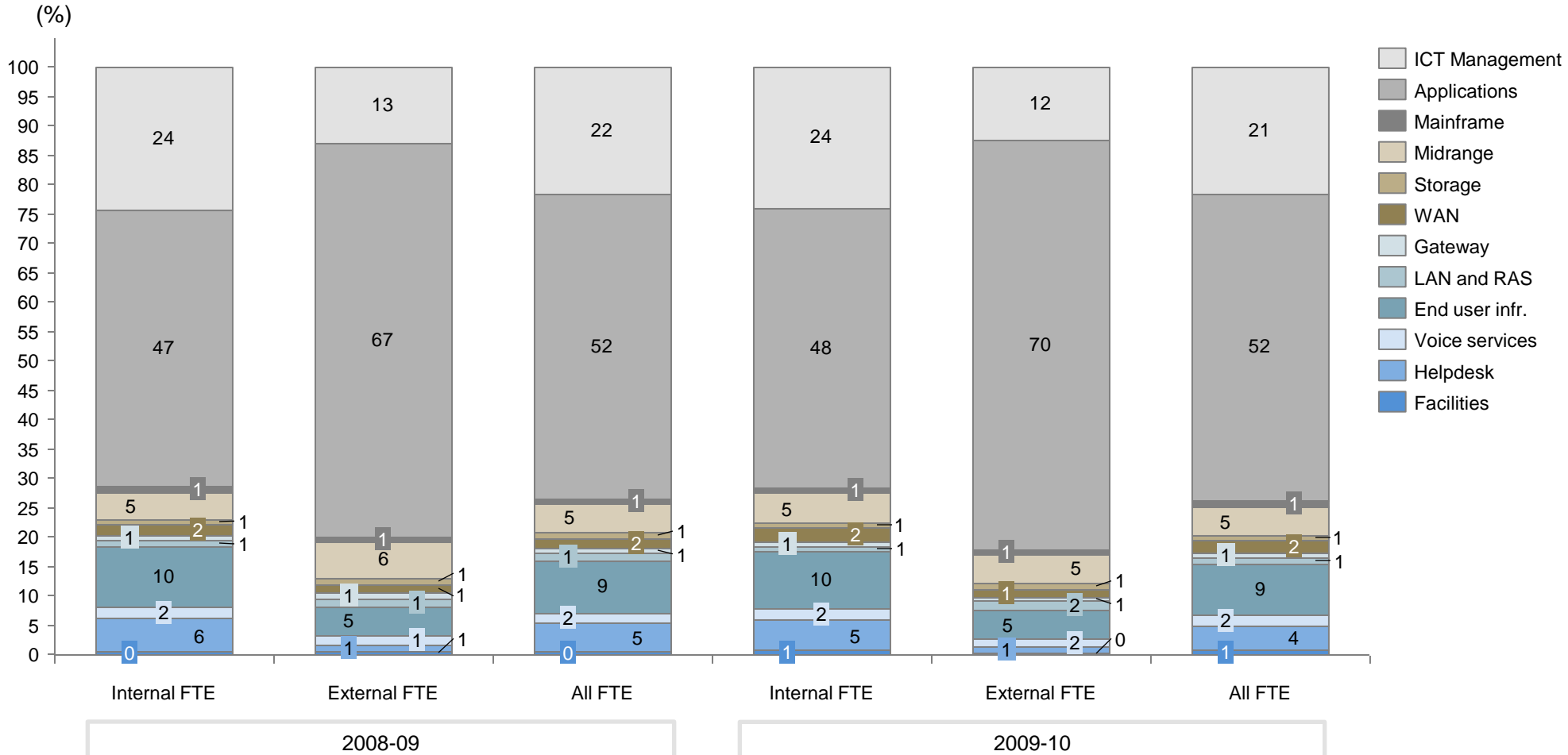


Definition: Total reported internal ICT FTE at each pay-grade, each divided by total internal ICT FTE. Expressed as a percentage.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only. Figures are rounded to one decimal point. Data excludes some staff not employed under the Public Service Act. APS 1 to APS 6 – 'Australian Public Service' positions within the Australian Public Service (APS), ranging from levels 1 to 6 (junior levels within the APS); EL 1 to EL 2 – 'Executive Level' positions within the APS; SES 1 to SES 3 – 'Senior Executive Service' levels within the APS, ranging from levels 1 to 3.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Proportion of ICT FTE in each service tower



Definition: Total reported ICT FTE (internal and external) within each service tower divided by total number of ICT FTE (internal and personnel). Expressed as a percentage.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only. Data excludes some staff not employed under the Public Service Act.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Contents

---

Introduction

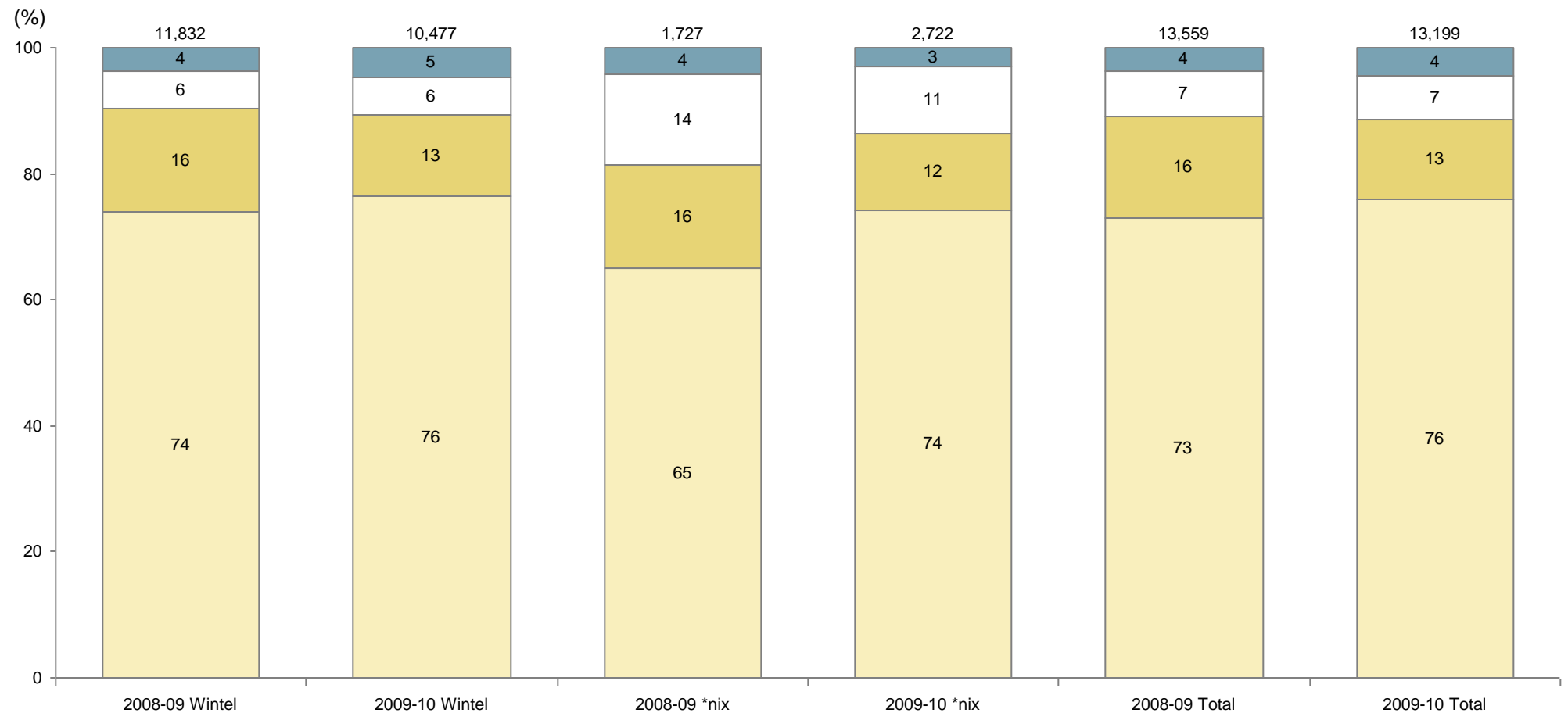
Definitions

Aggregate expenditure

Aggregate personnel

**Infrastructure**

# Midrange – physical servers– functional breakdown - large agencies



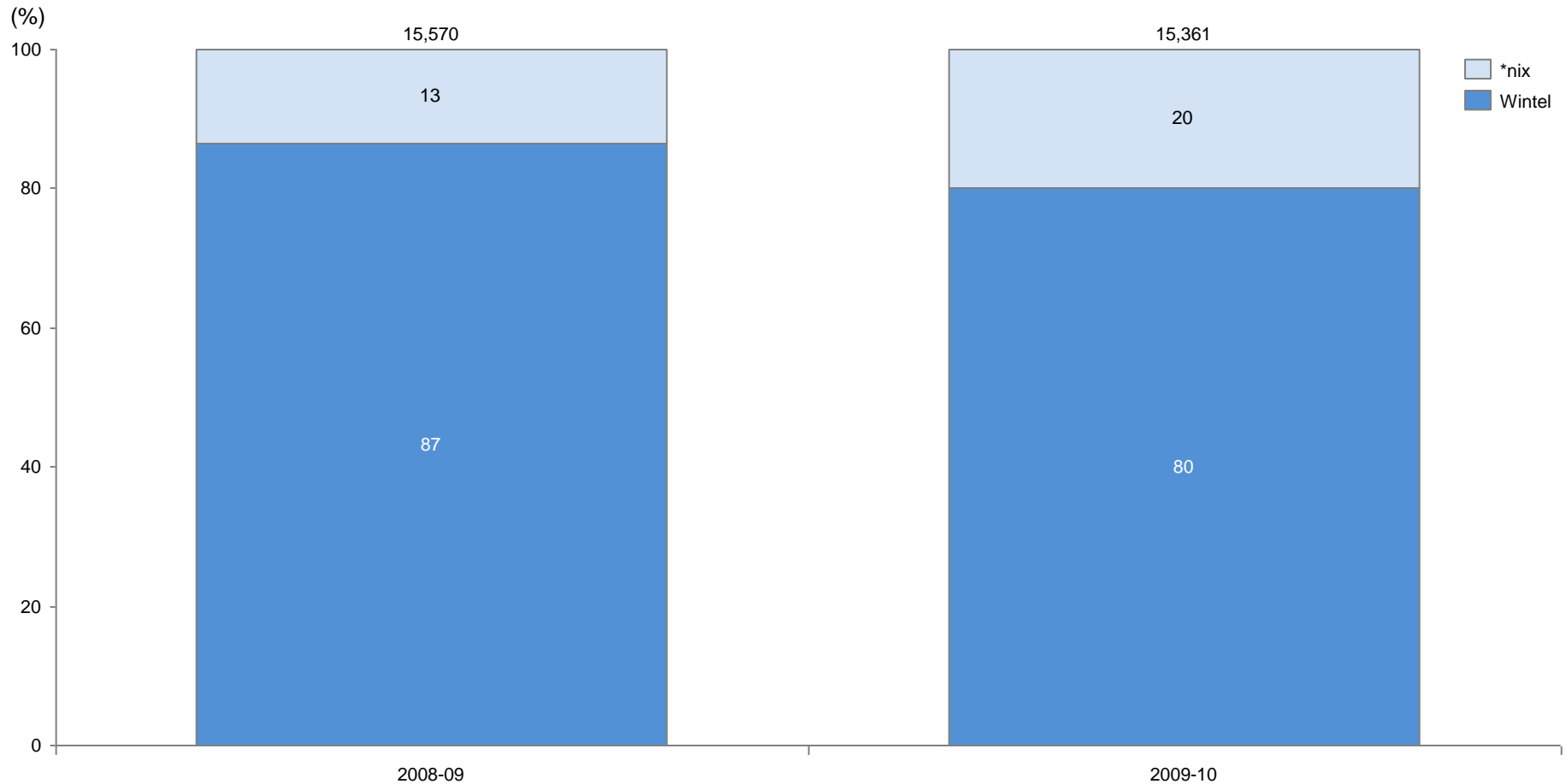
Definition: Proportion of reported installed physical midrange Wintel and \*nix servers, each by classification.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only. A server is a computer which provides services to other computers on a network

Source: ICT Benchmarking Data Collection as at 4 March 2011.

- Dedicated disaster recovery
- Test
- Development
- Production

# Midrange – physical servers– Wintel/\*nix breakdown - large and medium agencies

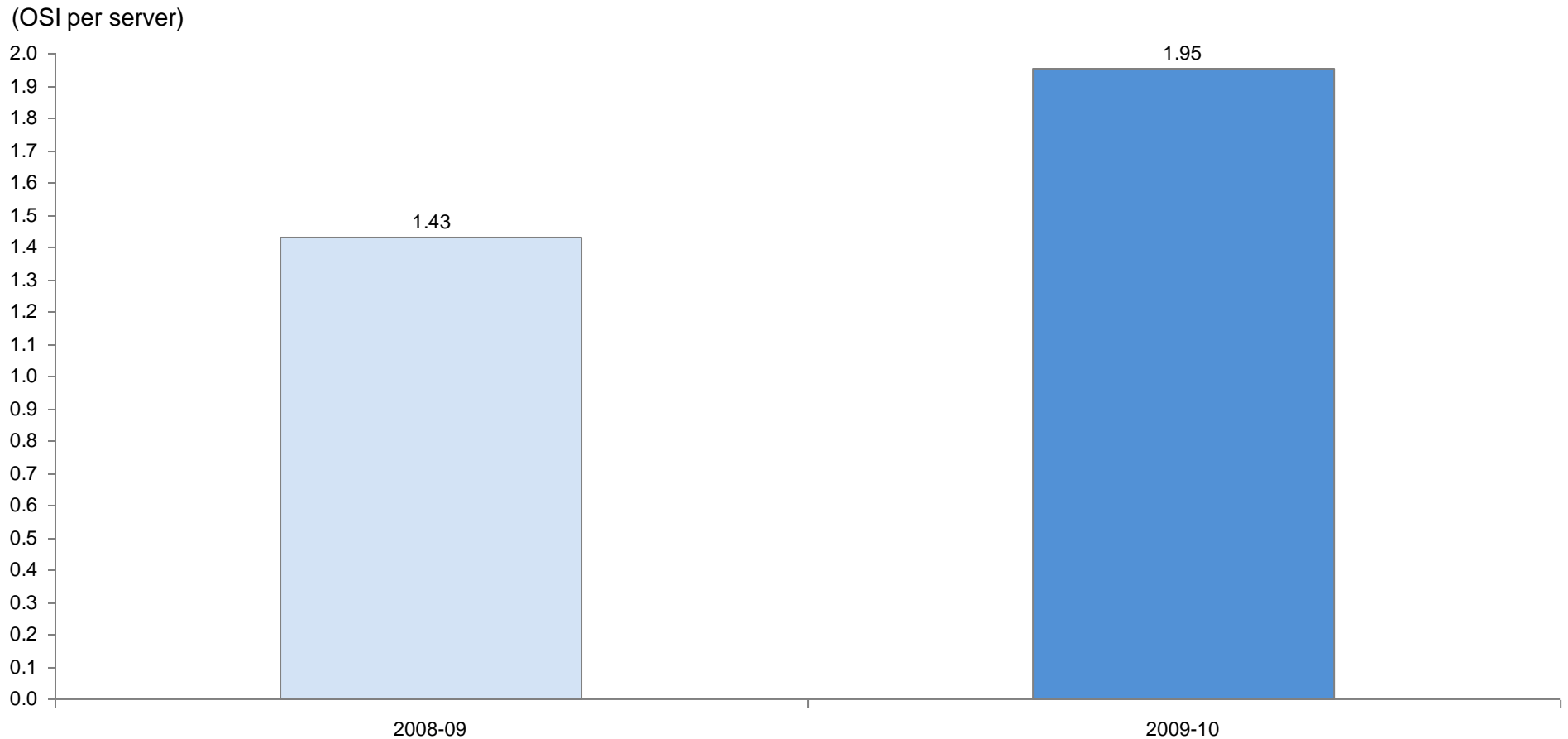


Definition: Proportion of reported installed physical midrange Wintel and \*nix servers. '\*nix' refers to midrange server platforms based on Unix, Linux, Solaris, FreeBSD and related platforms.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Number of operating system instances (OSI) per physical server

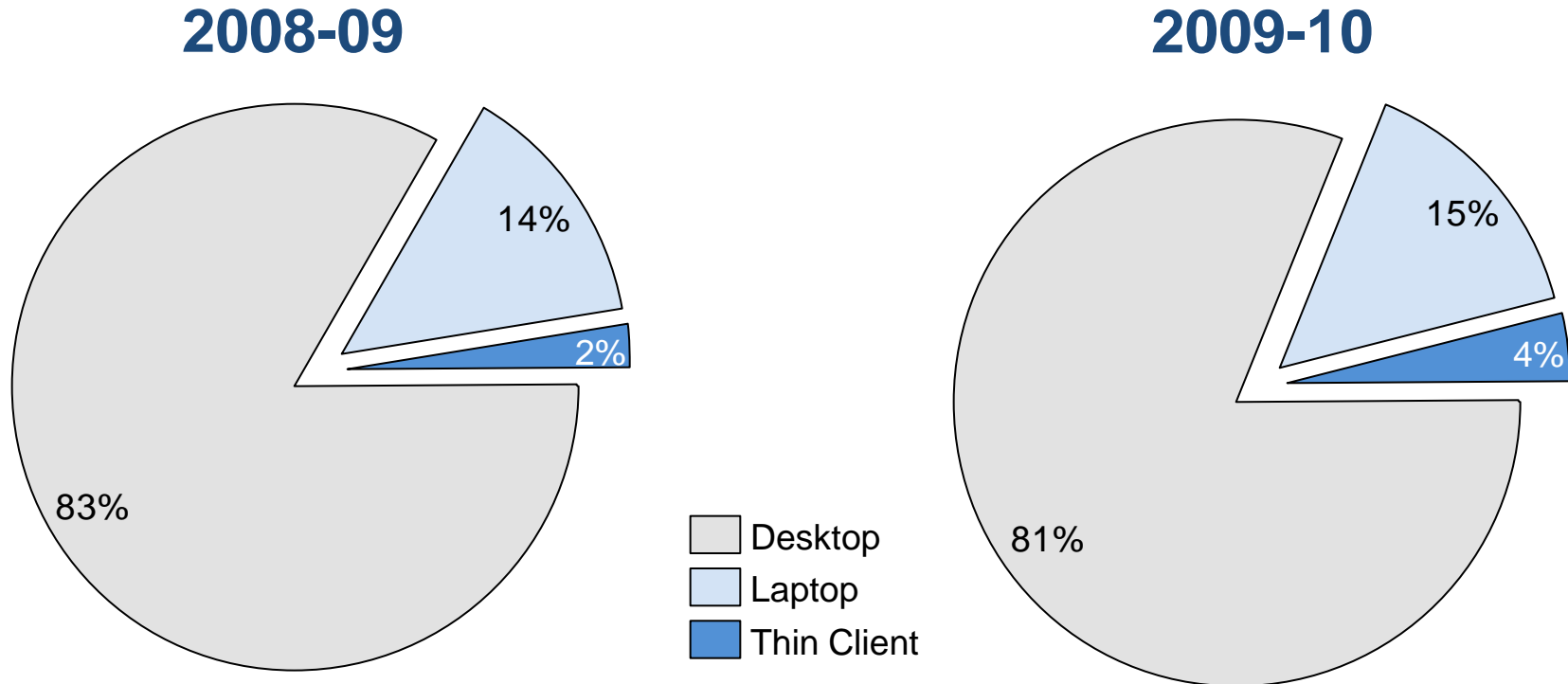


Definition: Total reported number of operating system instances divided by the total reported number of physical servers.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# End user infrastructure – mix of devices

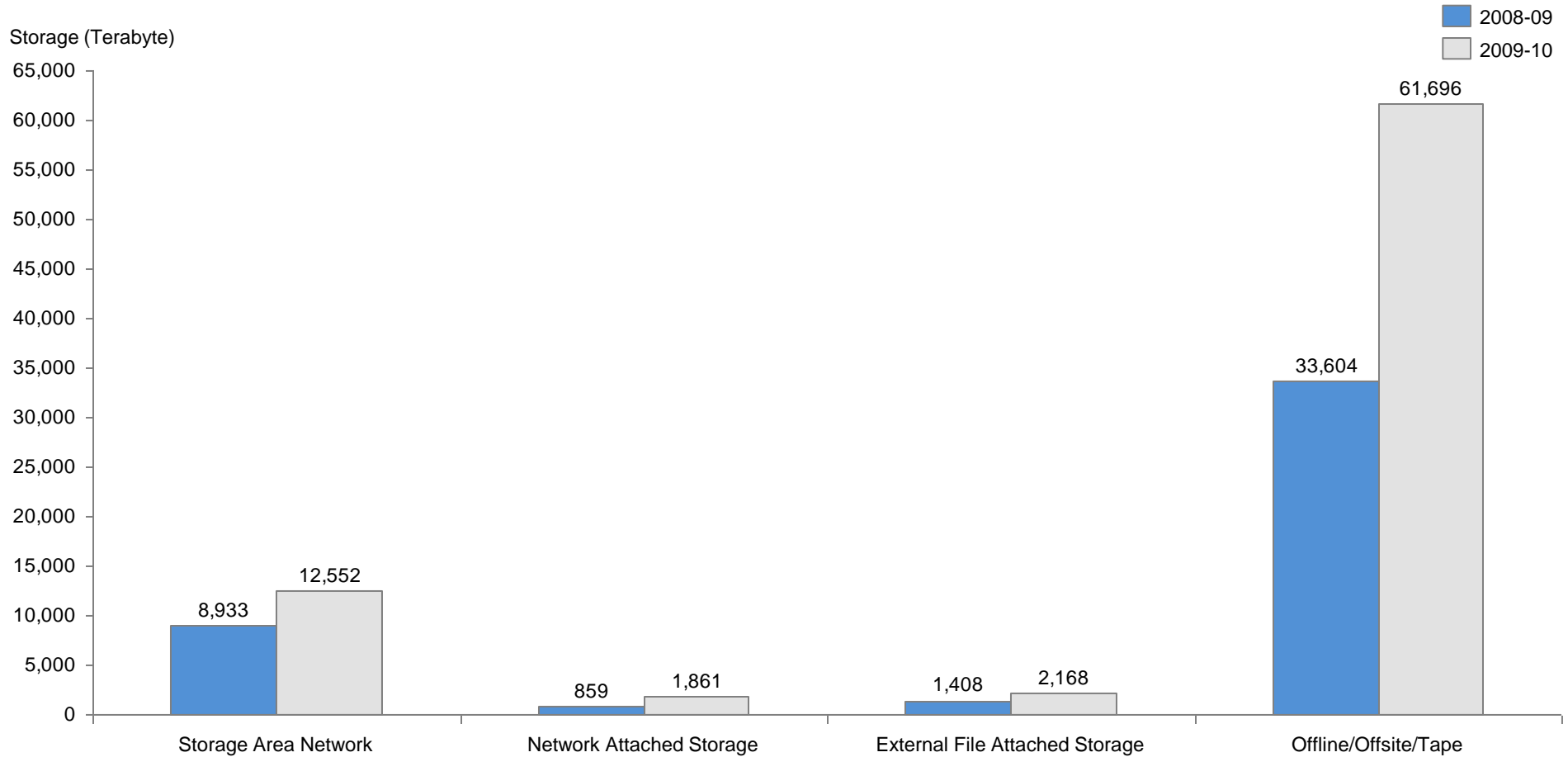


Definition: Total number of desktops reported divided by (total number of desktops plus laptops plus thin client devices reported); and total number of laptops reported divided by (total number of desktops plus laptops plus thin client devices reported), and total number of thin client devices reported divided by (total number of desktops plus laptops plus thin client devices reported). Splits of desktops, laptops and thin client devices expressed as a percentage.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large and Medium agencies only.

Source: ICT Benchmarking Data Collection as at 4 March 2011.

# Infrastructure - Storage – Large agencies



Definition: Total number of Terabytes (installed capacity) reported in each category of storage.

Note: Only agencies that provided data for this metric in both years are included in the calculation. Data is for Large agencies only.

Source: ICT Benchmarking Data Collection as at 4 March 2011.